Developing Agricultural Input Markets in Nigeria (DAIMINA)Grant No. 620-G-00-01-00270

End of Project Report

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List of Acronyms and Abbreviations

ADB African Development Bank

ADP Agricultural Development Project

AFAMIN African Agricultural Market Information Network

AFAN Apex Farmers Association of Nigeria

AIDA Agri-Input Dealers Association

CPP Crop protection products

DAIMINA Developing Agricultural Input Markets in Nigeria

DAP Diammonium phosphate

DFID Department for International Development

FAO Food and Agriculture Organization of the United Nations

FATIA Federation of Agri-Input Trade Associations in Africa

FCT Federal Capital Territory

FDA Federal Department of Agriculture

FEPSAN Fertilizer Producers and Suppliers Association of Nigeria

FFD Federal Fertilizer Department

FGN Federal Government of Nigeria

FMARD Federal Ministry of Agriculture and Rural Development

IEHA Initiative to End Hunger in Africa

IITA International Institute of Tropical Agriculture

K Potassium

KASCO Kano State Agricultural Supply Company

MANR Ministry of Agriculture and Natural Resources

MARKETS Maximizing Agricultural Revenue and Key Enterprises in Targeted

Sites

MIS Market Information System

MISTOWA Market Information Systems and Traders' Organizations in West

Africa

mt Metric ton

Nigerian Naira

N Nitrogen

NACRDB Nigerian Agricultural Cooperative and Rural Development Bank

NAFCON National Fertilizer Company of Nigeria
NAIDA Nigeria Agri-Input Dealers Association
NAMIS Nigeria Agri-Market Information Service

NCRI National Cereal Research Institute NGO Non-Governmental Organization

NSPFS National Special Program for Food Security

P Phosphorus

PCU Project Coordinating Unit

PrOpCom Promoting Pro-Poor Opportunities through Commodity and

Service Markets

SEEDAN Seed Association of Nigeria

SG 2000 Sasakawa-Global 2000

SO Strategic Objective

USAID United States Agency for International Development

WARDA West Africa Rice Development Association

Developing Agricultural Input Markets in Nigeria (DAIMINA)

I. Executive Summary

A. Introduction

Agriculture is a mainstay of the economy of Nigeria. It accounts for 41% of the gross domestic product, and an estimated 67% of the population derive their livelihood from agriculture-related activities. Historically, despite the predominant role of agriculture in Nigeria, the low use of appropriate yield-enhancing technologies has been a major constraint to increased agriculture productivity. Cognizant of the great potential to improve yields and thus stimulate improved food security, trade, and income growth, in 1999 IFDC conducted a strategic assessment of the agricultural inputs markets in Nigeria. A key follow-on activity to the assessment was the 2000 national stakeholders' workshop wherein public and private sector stakeholders collaborated to develop a solid development strategy for the agricultural input markets.

USAID/Nigeria awarded IFDC grant funding in the amount of \$3,754,000. The DAIMINA project implementation period was September 10, 2001-December 31, 2004. This end of project report records the project activities, achievements, and lessons learned during the life of the DAIMINA project.

B. Project Goal, Purpose and Objectives

The **primary goal** of the DAIMINA project was to promote private-sector-based agricultural input marketing, with a special focus on fertilizers. The project purpose was to nurture and fortify open and competitive markets and dealer networks as the primary mechanisms to improve farmer access to appropriate agricultural technologies. The project **objectives** were to (1) establish a market environment that was conducive to private sector investment, (2) improve agri-input business knowledge and skills and technical knowledge of

¹In collaboration with the United States Agency for International Development (USAID)/Nigeria and various stakeholders (e.g., International Institute of Tropical Agriculture [IITA] and West Africa Rice Development Association [WARDA]).

agri-input marketing entities at all levels in the marketing chain in selected states, and (3) improve market transparency on agri-inputs.

C. Project Activities

The DAIMINA project activities were directly related to achievement of the project objectives; they were market based and demand driven. All project activities were implemented by IFDC and subcontractor, International Institute of Tropical Agriculture (IITA). Throughout the life of DAIMINA, extensive collaboration was involved with a myriad of stakeholders. The three main activity areas were as follows:

Policy and Regulatory System Development

 DAIMINA worked to develop a market environment that was conducive to private sector investment in agricultural inputs. Key activities included policy assessments and analyses, policy-related workshops, direct technical guidance to the Federal Government of Nigeria (FGN), and capacity building at all levels to support policy reforms and the establishment of a market-based regulatory environment.

Human Capacity Building in Agri-Input Marketing

 Human capacity-building activities included a series of formal, targeted training programs, on-the-job training and networking for private entrepreneurs, and development and dissemination of capacity-building educational materials.

Market Transparency Improvement

 DAIMINA worked to improve transparency in agri-inputs markets through the design and implementation of a market-oriented Market Information System (MIS). The MIS increased stakeholders' access to reliable and current information on the availability and prices of inputs in Nigeria and in international markets, thus improving the knowledge of private entrepreneurs to support strategic decision-making.

D. Project Focal Areas

The DAIMINA project activities were focused on four key geographic areas: Kano, Oyo, Bauchi, and FCT Abuja. The selection of the project focal areas was based upon the role of agriculture in the state, the perceived potential for private sector development, and (in the case of Abuja) the presence of authorities responsible for policy and regulatory decision-making.

E. Summary of Activities and Achievements

The DAIMINA project was, to a significant extent, successful in achieving the project goal, purpose, and objectives. The market environment for increased private participation was significantly improved through the FGN endorsement of private sector participation in agri-input markets. Private sector participation in markets increased during the project life, and the foundation for further growth is solidly in place. Examples of the project achievements realized include the following:

- The project trained 500 agro-input producers and dealers, grain merchants, and food processors and established commodity chains that link them with 750,000 farmers.
- The project established four pilot state-level trade associations through which the team
 provided business, technical, and extension training to 350 dealers, who in turn train their
 sub-dealers and transfer technology to their farmer customers.
- The dealers realized 38% annual growth in their business, provided advisory services, and 40% gained access to over \$500,000 in commercial credit. Because of the increased business, efficiency, and competition, transactions costs were lowered.
- The private sector increased imports/distribution of fertilizer by 70% annually in the past three years, and supplied over 500,000 metric tons (mt) in 2004, compared to 310,000 mt in 2002.
- The project helped form the national trade association of Fertilizer Producers and Suppliers
 of Nigeria (FEPSAN) and four state level trade associations, which have begun to advocate
 policy and regulatory reform.
- DAIMINA also completed an evaluation of the Sokoto (Nigeria) phosphate rock deposit. The
 purpose of this study was to provide a definitive assessment of the phosphate rock deposit as
 related to its value and potential uses in fertilizer supply, either through use of the rock for

- direct application or for down-stream processing. The best technically feasible use of the Sokoto phosphate rock is for single superphosphate production.
- Completed six agricultural input policy-related studies.
- Conducted (with the Federal Ministry of Agriculture and Rural Development [FMARD]) a
 national workshop on agri-input policies.
- Conducted an assessment of the requirements to establish a fertilizer regulatory system in Nigeria, including equipment, technical assistance, and training requirements.
- Revised (and presented to the FGN) the Fertilizer Board (1977) Act and the Agric Seed Laws of 1992.
- FMARD and National Council on Agriculture accepted proposed amendments to Fertilizer Regulations.
- Facilitated the formation of four state and two national agri-input dealer associations, i.e.,
 Fertilizer Producers and Suppliers Association of Nigeria (FEPSAN) and Agri-Input Dealers Association (AIDA).
- Completed a pre-feasibility study for an ammonia-urea plant and scope of rehabilitation of the National Fertilizer Company of Nigeria (NAFCON).
- Completed and distributed 2,000 copies of a directory, listing all of trained agri-input dealers.
- In the 2004 crop season, DAIMINA-trained dealers sold agri-inputs valued at US \$54 million to approximately 750,000 customers, an increase of 188.0% over 2001 sales.
- Nigeria agri-market information was collected, analyzed, and disseminated through monthly DAIMINA agri-input news bulletins and the African Agricultural Market Information Network (AFAMIN) website.
- A national level public sector agency Nigeria Agri-Market Information Services (NAMIS)
 was established jointly with the Project Coordinating Unit (PCU)/FMARD and Special
 Program for Food Security (SPFS)/Food and Agriculture Organization (FAO) on a cost-share
 basis.
- An estimated 40% of the dealers in Kano and Oyo regions have received bank loans from the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB); pass through credit to retail dealers and farmers is now occurring.
- A fertilizer voucher scheme implemented jointly with the SPFS project and PCU enabled 22 DAIMINA agri-input dealers to supply 282 mt of fertilizer on a cash payment basis to

1,259 SPFS farmers. The exercise demonstrated a market-friendly safety net alternative to direct subsidies.

F. Impact and Lessons Learned

The DAIMINA project clearly demonstrates that an appropriate mix of interventions (e.g., improved macro-environment, human capacity building, improved market transparency, and improved access to credit) will stimulate increased private sector investment in agricultural markets. The project further demonstrates that significant progress can be achieved in agri-input market development through increased private sector participation.

The main impact was the recognition in Nigeria that the private sector rather than public entities is the way to import and distribute agri inputs. This is evident in that states in the program gave it high marks and other states asked to be included.

"Because of the critical importance of fertilizer and other crop production inputs to increasing agricultural productivity, it will be necessary for MARKETS to continue the efforts begun under DAIMINA to increase private sector marketing of fertilizer and other agricultural inputs."

USAID Mission RFP for MARKETS of Jan. 5, 2005

Lessons Learned

Key lessons learned under DAIMINA relevant to SO 12 and the new Maximizing Agricultural Revenue and Key Enterprises in Targeted Sites (MARKETS) and regional Market Information Systems and Traders' Organizations in West Africa (MISTOWA) projects include the following:

- Human capacity building, improved market environment, and improved market transparency
 are keys to private sector participation in the market.
- Access to credit is a key component to expanded private sector investment, and upon receiving credit, agri-input wholesalers will extend credit sales to dealers.
- Broad-based stakeholder (e.g., public and private sector, farmers, banks, non-governmental organizations [NGOs], etc.) participation will fortify and accelerate the market development process.

- Market transparency is essential to strategic decision-making at both the public and private sector levels; improved availability of market information is key to reducing transaction costs by the private sector. At the government level, improved availability of information on market conditions is key to minimizing decisions that may have a negative impact on the private sector.
- Policy reform is not a straightforward process; but progress can be achieved when stakeholders work in harmony and policy assessments provide a sound basis for constructive dialogue.
- Increased private sector participation will contribute to improved performance in agricultural input markets.

Trade associations offer great potential as mechanisms to organize key private sector commercial agents into viable trade promotion and civil society organizations that can promote reliable, competitive, and value-added services to farmers and producer groups. The DAIMINA project has demonstrated that there is interest and benefits from agro-input dealers, who have significantly increased their business, and thus access of critical inputs to farmers. They recognize the potential for a collective voice in influencing policies. Traders have asked the project to assist them form such associations at local, national, and regional levels.

The DAIMINA project served as a bridge to SO 12 by setting the stage for improved agri-input delivery and use. It accomplished more than training dealers who in turn increased their business, increased competition, and made improved agri-inputs more readily available to farmers. DAIMINA also demonstrated that trade associations can be established and work in Nigeria to promote private sector efficiency, capacity building, improved farmer access to inputs, lower transaction costs, and promote advocacy.

II. An Overview of DAIMINA Project Activities and Results

A. Background

USAID has noted that, "despite rapid urbanization," more than half of the Nigeria population is rural; an estimated two-thirds of the population derive their livelihood from agriculture-related activities. Agriculture provides a precarious livelihood and is marked by declining productivity, environmental degradation, limited use of yield-enhancing inputs, and poor market linkages. Further compounding the development challenge for Nigeria agriculture is the fact that farmers and rural entrepreneurs have not been well served by financial institutions; few entrepreneurs have access to financial services such as savings and credit that would help their enterprises to grow and diversify.

Crop yields of cereals are very low (1.0-1.5 mt/ha) and commodities, like cocoa and rubber, are no longer competitive in regional or international markets. Post-harvest losses are high, appropriate processing and value adding technologies are not readily available, a commercial orientation is lacking, and market information is difficult to access and is unreliable. Production gains have been made by expanding the cultivated area, rather than through increased productivity, putting the remnants of the natural resource base at risk. Private sector growth in agri-marketing is constrained by a poor macro-environment, the erosion of Nigeria's competitiveness, poverty, and marginal growth in Nigerian markets.

In 1999 IFDC, in collaboration with IITA and the West Africa Rice Development Association (WARDA) with the funding support of USAID, conducted an assessment of the agricultural inputs markets in Nigeria. The purpose of the assessment was to (1) better understand the functioning of the inputs markets and their potential role in accelerating agricultural production, (2) identify constraints to improved performance of the inputs markets, and (3) develop a strategic action plan to facilitate orderly development of inputs markets. Following completion of data collection and analyses, the study team developed a preliminary set of actions and interventions (i.e., an action plan) that would stimulate improved performance of the inputs markets and accelerate increased farmer use of modern production technologies. A national stakeholders' workshop was organized in October 2000 to review the study findings and

develop stakeholder consensus on a strategic set of actions to develop the agricultural input markets. It was realized that transformation of Nigeria agriculture (including improved use of modern technologies) could be significantly enhanced by improving the performance of agricultural input markets. It was considered necessary to attract private sector participation and investment in agribusiness to improve farmer access to inputs.

B. The DAIMINA Project

USAID/Nigeria awarded IFDC grant funding in the amount of \$3,754,000. The DAIMINA project implementation period was September 10, 2001-December 31, 2004.

The 3-year project was titled *Developing Agri-Inputs Markets in Nigeria* (DAIMINA). The DAIMINA project directly supported achievement of the USAID strategic objectives that (a) focused on *strengthening institutional capacity for economic reforms* and (b) *worked to enhance capacity to revive agricultural growth*.

The DAIMINA project implementation began in November 2001 with the posting of the project Chief of Party and recruitment of key national staff. The DAIMINA project office was opened in December 2001 in Abuja. In order to provide on-going support and minimize delays in response time to site-specific activities, zonal offices were established in Kano and Ibadan in January 2002. The official launching of the DAIMINA project was held on January 24, 2002.

C. Project Goals, Purpose and Objectives

The DAIMINA project was designed to support achievement of the USAID strategic objectives related to economic reforms and enhanced capacity for agriculture growth revitalization. The **primary goal** of the DAIMINA project was to promote private sector-based agricultural input marketing, with a special focus on fertilizers. Achievement of the project goal was key to improving the farmer access to and use of agri-inputs (e.g., seeds, fertilizers, and crop protection products [CPPs]). The **project purpose** was to nurture and fortify open and competitive markets and dealer networks as the primary mechanisms to improve farmer access to appropriate agricultural technologies. The project **objectives** were to (1) establish a market environment that was conducive to private sector development and investment, (2) upgrade the

agri-input business knowledge and skills and technical knowledge of agri-input marketing entities at all levels in the marketing chain, and (3) improve market transparency to improve the efficiency and effectiveness of agri-input markets in Nigeria.

Initially, and to demonstrate the role of the private sector, two states (Kano in the North and Oyo in the South) were selected as pilot states. Based on the demand from other state governments, FMARD, and the private sector, project activities were expanded to Bauchi State in the second year and the Federal Capital Territory (FCT) of Abuja in the third year (see map, Figure 1). In each state, 10 rural/semi-urban markets were selected for private sector development. In total, the project area was comprised of 40 markets in three states and the FCT of Abuja.



Figure 1. Map of Nigeria

D. Project Activities

The DAIMINA project design was based upon the IFDC-led *Strategic Assessment of the Agricultural Input Markets in Nigeria*. The design included interventions and activities that were directly related to achievement of the project goal, purpose, and objectives.

The DAIMINA project focused on private sector development as the key to improved performance of the agri-input marketing system. Thus, all project activities were directed to achieving expanded private sector participation in input markets; they were market-oriented and demand driven. The key project activity areas were in (1) policy and regulatory system development, (2) human capacity-building in agri-input markets, and (3) market transparency improvement. The project also engaged in activities to improve wholesaler and retailer access to credit through the formal Nigeria financial system. A review of the main project activities follows.

1. Policy and Regulatory System Development

The DAIMINA project worked to improve the macro environment (government policy and the regulatory framework) for agricultural inputs. The objective was to reduce policy-related constraints to private sector participation and investment in agricultural input markets.

IFDC's approach to reducing policy-related constraints involved (1) the completion of a series of policy studies to better understand the policy environment and the impact on the inputs market, (2) the conduct of policy-related workshops to allow stakeholders the opportunity to review and discuss policy implications and recommendations, (3) human capacity-building efforts targeting government officials, and (4) the formation of private sector associations to achieve (among other benefits) policy advocacy. The following policy-related studies were completed under DAIMINA:

- Towards a Fertilizer Regulatory System for Nigeria (2002).
- Assessment of Seed Sub-Sector Policy in Nigeria (2002).
- Assessment of Nigerian Government Fertilizer Policy and Suggested Alternative Market-Friendly Policies (2002).

- Assessment of Requirements for Establishing a Fertilizer Regulatory System in Nigeria (2002).
- National Fertilizer Board (Amendment) Act 2003 and Fertilizer Regulations (2003).
- Multilateral Trade Agreements on Agriculture and Implications for Agriculture and Agribusiness Development in Nigeria (2003).

One of the basic strategies under DAIMINA was to establish early, in the life of the project, the policy-related actions that would be needed to stimulate private sector investment. This was the rationale for completing the above policy-related studies during the first 18 months of the project. For illustrative purposes, the Assessment of Nigerian Government Fertilizer Policy and Suggested Alternative Market-Friendly Policies (2002) revealed the negative impact of government subsidies on the development of competitive agri-markets. It showed that the procurement and distribution of fertilizer through public sector agencies only was inefficient and ineffective and that the government's role in the inputs markets essentially limited private sector participation. The study further indicated that the government fertilizer policies had an adverse impact on national, state, and local government budgets. For example, between 1990 and 1996, the fertilizer subsidy cost, as a percentage of the national budget, ranged from 16.8% in 1991 to a high of 42.7% in 1992. The policy analysis work of DAIMINA identified that the FGN fertilizer policy framework failed to capture the benefits of using the considerable resources available in Nigeria to produce fertilizer for in-country use and for export to the rest of Africa.² The lost revenues from not producing fertilizer for in-country use and the lost revenues from foreign exchange earnings in Nigeria are immense.

As a follow-up action to the policy studies, DAIMINA and FMARD conducted a national workshop on agri-input policies. The workshop goal was to review the policies and develop a consensus on policy actions needed to stimulate agri-input investment by the private sector. In order to accelerate the process of policy reforms, DAIMINA worked to create four state and two

² Nigeria, like many developing countries, established fertilizer plants. Today, Indonesia has the capacity to produce 9,229,000 mt of urea. The National Fertilizer Company of Nigeria (NAFCON) had the capacity to produce 1,488,000 mt of urea, but after 1992 never reached its capacity and ceased to function in 1997.

national agri-input dealer associations, including Fertilizer Producers and Suppliers Association of Nigeria (FEPSAN) and Agri-Input Dealers Association (AIDA).

In 2003, the DAIMINA project played a key role in working as a technical and administrative member of the FMARD constituted fertilizer law review and seed law review committees.³ The DAIMINA project played a key role in the government's efforts to upgrade the Fertilizer Board (1977) Act and the Agric Seed Laws of 1992.

2. Capacity Building in Agri-Input Marketing

Capacity building in agri-input marketing was a major activity of DAIMINA. As an initial activity, the project conducted a benchmark, need-based survey of agri-input marketers to determine technical and business knowledge levels, type of business operations that were engaged in agri-input supply and better understand the functioning and deficiencies in the agri-inputs markets. Knowledge gaps were identified and priority capacity-building needs were established. The benchmark survey findings, in Oyo State, indicated that the agri-inputs markets were both fragmented and seriously underdeveloped. Only one-third of the input supply companies had retail dealers. Training of dealers was confirmed by only a single company. As a result, farmer access to agri-input supplies was limited. Agri-input prices reflected high transaction costs, a result of market and procurement inefficiencies. Dealer services were limited to supply of products only and promotional activities were basically nonexistent; it was estimated that only two-thirds of the respondents provided agronomic advice to farmers.

It was clear that human capacity development was key to improved private sector performance. DAIMINA, in collaboration with USAID and key stakeholders, selected three capacity building activities—formal training programs, on-the-job training/direct technical assistance, and workshops. In addition, the project emphasized networking as a key to capacity building. A summary of the DAIMINA activity areas follows.

³ Both committees had wide participation with representatives from FGN, national research institutes, farmer organizations, the Food and Agriculture Organization of the United Nations (FAO), National Special Program for Food Security (NSPFS), and DAIMINA.

a. Formal Training Programs—The training program curriculum design was based upon the benchmark needs-based survey, stakeholder discussions, and prior IFDC experience in Nigeria and other African countries. The benchmark survey, for example, indicated that agricultural marketing, fertilizer and improved seed knowledge, and CPP product and use safety were major areas of training interest. In order to standardize the training materials and facilitate "train the trainer" opportunities, four training modules were prepared as follows:

- Product knowledge.
- Sales and marketing.
- Handling and storage of agri-inputs and crop produce.
- Business management, bookkeeping, and accounting.

While the benchmark survey indicated that there was a high (80%) literacy rate for the agri-input dealers, the training programs were prepared and translated for local languages. Each participant was provided with a copy of each training module.

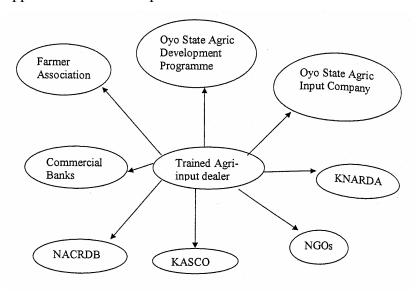
The training participants included agro-enterprise entrepreneurs, rural traders, sales personnel of agri-input companies, ADP extension workers, food processors, and grain agents. During the life of the project, a total of 436 agri-input dealers (including importers, wholesale and retail dealers) participated in formal training programs (Table 1). The number of trained participants was equal to 124.5% of target. Upon satisfactory completion of the programs, each participant was awarded a training completion certificate. A directory of trained agri-input dealers was prepared and 2,000 copies were distributed to project-related stakeholders.

Table 1. Agri-Input Dealers Trained by DAIMINA by State

	Target Number of	Percent of Target Training
State	Dealers to be Trained	Achieved
Kano	185	
Oyo	110	
Bauchi	76	
FCT	65	
Total	436	100
Target	350	124.5%

b. On-Site Visits and Stakeholder Networking—In addition to the formal training programs, DAIMINA made on-site visits to the business establishments of the trainees to observe the level of application of classroom training (e.g., record keeping, product displays, and inventory management) and to provide on-site guidance on specific issues related to dealer operations. The on-site visits provided the added advantage of providing agri-input dealers and wholesalers with the latest agri-input technology information, business development opportunities, and updates on policy issues that may impact their business.

Networking of agri-input dealers, input suppliers, bankers, extension workers, and farmer groups was a priority activity (Figure 2). The networking activities were instrumental in facilitating the development and expansion of private sector associations. Networking also helped DAIMINA to set priorities on capacity building (e.g., workshop on fertilizer bulk-blending conducted during June 2002; a total of 60 participants were in attendance). As an example of the direct technical assistance afforded through networking, DAIMINA assisted 50 agri-input dealers in Oyo State alone to develop loan applications in the amount of N7.5 million to support their business operations.



Acronyms: NACRBD National Agricultural Cooperative Development Bank

KASCO Kano State Agricultural Supply Company

KNARDA Kano State Agriculture and Rural Development Company

NGO Non-governmental organization

Figure 2. Schematic of Networking of Trained Agri-Input Dealers

DAIMINA capacity-building activities extended to the development and dissemination of educational materials to support point-of-purchase knowledge transfer. For example, in the first quarter of 2003, DAIMINA developed (in Yoruba and Hausa languages) and disseminated 7,500 wall posters on product knowledge related to fertilizers. In addition, 100 dealer display boards were provided to dealers in Kano and Oyo States. During the second quarter of 2003, DAIMINA printed 200 copies of Fertilizer Production Technologies and Marketing manuals and 2,000 "cowpea" production leaflets. During the fourth quarter of 2003, DAIMINA produced 2,000 copies each of manuals on (a) Seed Technology and Marketing and (b) Safe Handling and Use of CPPs. Over the life of the DAIMINA project, almost 30,000 wall posters and 13,000 technical brochures were disseminated.

c. Workshops and Other Capacity-Building Activities—Workshops were a key capacity-building activity under DAIMINA and covered a range of topics from fertilizer import management to association development. For illustrative purposes, during the third quarter of 2002, DAIMINA conducted seven agribusiness workshops involving 193 participants. During the first quarter 2003, six workshops were conducted. During the third quarter 2003, a total of 15 workshops were conducted, including a National Workshop on Agri-Inputs Policy with 152 participants in attendance.

Special training workshops were organized for 173 senior officers of fertilizer blending plants, Agricultural Development Project (ADP) extension workers, Kano State Agricultural Supply Company (KASCO), agri-input dealers at NSPFS sites, and ADP enumerators (Table 2). The actual number of participants trained exceeded the target by 15%.

Table 2. Number of Stakeholders Trainee

	Target Number of	Percent of Target Training
Types of Trainees	Trainees	Achieved
Senior officers of blending plants	48	
KASCO sales staff	40	
ADP Extension workers and enumerators	85	
Total	173	115%
Target	150	

Special training workshops for farmers were organized in the areas of the rice production, fertilizer voucher scheme, and high-analysis fertilizers. The number of trainees in each area is shown in the Table 3.

Table 3. Number of Farmers Participating in Special Training Workshops

Topic of Training	Number of Trainees ^a
Rice production	1,681
Fertilizer vouchers	1,259
High-analysis fertilizers	340
Total	3,280

a. No target for the number of trainees was established.

In addition to workshops, the DAIMINA project initiated a number of demand-driven special activities including the following:

- Participation in (USAID-sponsored) Rice Alliance Program—DAIMINA supported this
 initiative in collaboration with Sasakawa-Global 2000 (SG 2000), IITA, WARDA, and
 ADPs, through training of dealers, farmers, and extension workers on modern production
 methodologies, including the use of modern inputs.
- Demonstration of economic benefits of high-analysis fertilizers—DAIMINA established demonstration programs in Kano, Bauchi, and Abuja on the use of high-analysis fertilizers.
 In addition to improving knowledge and awareness of high-analysis products, the demonstration results showed that fertilizer nutrient application costs could be reduced by

- 15%-20% with the use of high-analysis fertilizers. Diammonium phosphate (DAP) is an example of an excellent high-analysis fertilizer with lower cost per unit of nutrient.
- Introduction of a fertilizer voucher scheme—In order to provide the neediest farmers access to inputs in a market-friendly manner, IFDC designed and tested a "voucher-type" scheme. This included preparation of all materials and documentation for the program, training of dealers and farmers, and implementation of the program in collaboration with PCU and NSPFS.

The DAIMINA approach of broad-based stakeholder participation was evident in all such activities as they were undertaken in collaboration with SPFS, IITA, SG 2000, ADP, and others.

3. Market Transparency Improved

The third major project activity involved improving market transparency. This was achieved through strengthening the Market Information System (MIS) for agricultural inputs and the conduct of special studies to improve awareness of and provide potential private sector investors with investment related information.

The MIS was designed to improve user access to reliable and current information on availability and prices of inputs. DAIMINA started the collection and dissemination of agrimarket information through monthly agri-input news bulletins; the project also displayed information on the AFAMIN website jointly with IFDC, Lomé, and other partners. Together with PCU and SPFS, the project helped to create the National Agri-Market Information Service (NAMIS), which provides timely information on selected crops and agri-inputs and forms a base on which Nigeria can build a unified MIS system. Establishment of NAMIS as a semi-autonomous, joint activity by IFDC, PCU, and SPFS was a major accomplishment towards domestic capacity building and improvement in access to market information on inputs, food grain availability, and market prices. DAIMINA initiated the MIS activities by collecting current data on inputs and crop produce and publication through electronic and print media. NAMIS is receiving technical assistance from the IFDC–MISTOWA project, FAO, and several other projects and is emerging as a national agency for market information in Nigeria. A list of MIS documents prepared by DAIMINA is included in Appendix 1.

DAIMINA completed a series of special studies to advance market transparency. For example, the project (at the request of USAID) completed a pre-feasibility study to assess the scope for establishing a gas-based ammonia-urea production facility and rehabilitation of NAFCON. (NAFCON plants had become non-operational since 1997 due to lack of maintenance resulting from financial constraints and management problems.) The study concluded that with an investment of US \$150,000,000, NAFCON plants could be rehabilitated in a period of about 1 year. It was also recommended that action be initiated for a new fertilizer plant; it should be in the private sector.

DAIMINA also completed an evaluation of the Sokoto (Nigeria) phosphate rock deposit. The purpose of this study was to provide a definitive assessment of the phosphate rock deposit as related to its value and potential uses in fertilizer supply, either through use of the rock for direct application or for down-stream processing. Among other findings, the study suggested that due to the low reactivity of the rock, its use for a direct application material would be limited to certain conditions. (For example, use should be limited to conditions of highly acid soils, high rainfall, long duration crops and the rock would need to be ground into fine particle size. Due to high transport cost, use of the low analysis material would need to be in close proximity to the deposit site). The best technically feasible use of the Sokoto phosphate rock is for single superphosphate production.

DAIMINA also conducted a technical evaluation and market analysis for the nine fertilizer bulk-blend plants in Nigeria. This activity provided a current assessment of the status of the blending plants, problems were identified, and recommendations and opportunities for improvement were highlighted.

E. Collaboration With Stakeholders

The DAIMINA project was a complex effort that required strategic alliances to accelerate the development process. Collaboration with stakeholders afforded the opportunity to leverage project funding and also to gain endorsement of needed policy changes. In this regard, DAIMINA was successful in collaborating with multiple stakeholders: government ministries,

NGOs, and donor-funded projects dealing in agri-development. Included among the stakeholders were the NSPFS implemented by FAO and the PCU of FMARD, SG 2000, IITA, the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB), Union Bank, Rice Alliance, Seed Association of Nigeria (SEEDAN), Crop Life International, and the Apex Farmers Association of Nigeria (AFAN).

F. External Evaluation Report on DAIMINA

In May 2004, an independent assessment of the DAIMINA project was conducted at the request of the FGN. The assessment verified that the project made excellent progress in all three main areas of policy reform, agri-input market development, and MIS. The highlights of these main areas of project work are summarized below.

The external evaluation concluded that the project was confronted with problems that constrained the overall objectives, for example:

- The FGN continued to be engaged in the fertilizer business, thus disrupting the markets though inefficiency, uncertainty, and direct subsidies.
- The project life is too short and too limited. The plans and funding for replication are insufficient at this point to ensure continued momentum and fruition.
- The seed sector remains in disarray despite recommendations to improve it.

The major recommendations of the assessment are:

- Governments should allow the private sector to handle agri-inputs.
- Ways and means must be found to continue and expand the work of DAIMINA in all the potential agricultural states of Nigeria.

G. Project Results

The DAIMINA project achieved the project goal, purpose, and objectives. Albeit, the macro-environment policy framework is not yet fully reformed, the FGN has been made aware of the needed reforms. Likewise, even though fertilizer legislation has been accepted by FMARD and the National Council of Agriculture, it remains to be enacted and implemented. The government recognizes and endorses increased private sector participation and, as indicated by

the market-oriented voucher program, is cognizant of the need to ensure that government actions are introduced in a market-friendly manner. Private sector associations have been established and are working to develop capacity to provide a policy-related advocacy role to support private sector development.

Human capacity-building results exceeded the initial DAIMINA targets in terms of the number of participants trained. There now exists in the target geographic areas a cadre of trained input dealers that are fully capable of competing in a market-oriented environment. The dealers have upgraded their business management and marketing knowledge and skills and improved their knowledge of agri-input products to the extent that they are now providing advisory services to farmers. Most dealers are actively engaged in promotion of improved use of modern production technologies. Networking at all levels in the marketing system has contributed to improved performance of marketing functions and increased entrepreneur's access to commercial credit.

Market transparency in the agri-inputs markets has reached a level that decision-making is based upon informed estimates of market conditions—prices, supply availability, import arrivals, and product demand. Domestic market transparency is fortified through linkages with domestic and external market intelligence sources. Stakeholders better appreciate the need for and role of quality market information and have access to such information via multiple sources. For illustrative purpose, specific examples of project results are as follows:

• Establishment of Retail Outlets in Rural Weekly Markets

A total of 51 retail agri-input dealers were established by the wholesale dealers and trained by the project (included in Table 1).

• Agri-Inputs Sales by Private Dealers

During the 2004 crop season, the DAIMINA-trained dealers sold agri-inputs worth \$7,103,721,337 or about US \$53,816,070 to approximately 750,000 customers. In 2001 those figures were \$2,468,360,000 or about US \$18,699,697, respectively, with sales to

250,000 customers. Agri-input sales data among DAIMINA-trained dealers for the period 2001-2004 are shown in Figure 3 and Table 4.

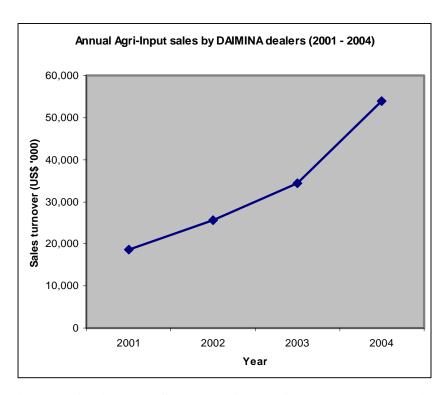


Figure 3. Agri-Inputs Sales by DAIMINA Dealers, 2001-2004

Table 4. Annual Agri-Input Sales by DAIMINA Dealers, 2001-2004

		Value of	Percent	Estimated	Mean Sales Per
	Value of	Input Sales	Increase	Number	Customer
Year	Input Sales (N)	(US \$)	Over 2001	Customers	(US \$)
2001	2,468,360,000	18,699,696	-	250,000	74.80
2002	3,381,741,000	25,618,583	37.0	342,500	74.80
2003	4,564,684,000	34,407,440	84.0	562,500	61.17
2004	7,103,721,337	53,855,124	188.0	750,000	71.80

a. 132 Nigerian Naira equals US \$1.00.

• Trade Associations Developed and Functioning

A total of 6 input dealer associations were developed and another 40 retail groups were fortified by the DAIMINA project.

The details about agri-input dealers associations are summarized in Table 5.

Table 5. Summary Data About Agri-Input Dealers Associations Developed by DAIMINA

Administrative		Number of
Level	Association Name	Associations
National	Fertilizer Producers and Suppliers Association of	1
	Nigeria (FEPSAN)	
	Nigeria Agri-Input Dealers Association	1
	(NAIDA)	
State	Kano State Agri-Input Dealers Association	1
	(KASAIDA)	
	Oyo State Agri-Input Dealers Association	1
	(OSAIDA)	
	Bauchi State Agri-Input Dealers Association	1
	(BASAIDA)	
	Federal Capital Agri-Input Dealers Association	1
	(FCAIDA)	
Market	40 Agri-Input Retailer Associations	40
Total		46

Particularly noteworthy was the formation of FEPSAN with a registered membership of 17 importers, producers, and manufacturers. FEPSAN has an established office in Abuja. A 17-member board of directors and a 5-member board of trustees have been elected. An interim executive secretary has been appointed to manage the day-to-day affairs of the association. The following three subcommittees with five members each have been put in place by the Board of Directors.

- 1. Finance and General Purposes Committee—administers the financial aspects and general activities of enrollment of members.
- 2. Business Discipline and Ethics Committee—Handles the development of market discipline on pricing, quality assurance, and business ethics.

3. Public Relations Committee—Responsibility includes arranging dialogue with federal and state governments/other stakeholders and publicity.

FEPSAN is functioning well. Two policy dialogue meetings have been held with the Minister of FMARD, and one each with the USAID Mission Director and the chief Economic Advisor National Planning Commission. Ten state-level meetings with senior officials of the Ministry of Agriculture and Natural Resources (MANR) were held and banks approached for micro finance. FEPSAN, through its negotiations with the FMARD, hopes to bring some favorable changes in the fertilizer procurement policy. FEPSAN has approached FMARD to review selected policy issues. In a joint meeting held by IFDC-DAIMINA and FEPSAN (in November 2004) with the Honorable Minister of Agriculture and Rural Development, FEPSAN was asked to provide the FMARD with their suggestions on fertilizer procurement and subsidy and attend the consultative meetings to be held in February 2005 to finalize the arrangements for fertilizer procurement for the year 2005.

In 2004 the state and market level associations conducted 17 regular business development meetings with the wholesale suppliers and producers. With some discount on price and delivery, total supply orders for agri-inputs worth N549,083,000 (US \$4,159,720) were placed during those meetings.

• Fertilizer Voucher Scheme Implemented

As one market-friendly FGN intervention, IFDC introduced the fertilizer voucher scheme on a pilot basis. Fertilizer vouchers were issued by SPFS/ADPs to 1,259 SPFS-sponsored farmers. Twenty-two DAIMINA-trained agro-dealers supplied 228 mt (as authorized through vouchers) on a cash-and-carry basis at the specified price. IFDC DAIMINA trained the agro-dealers, and the IFDC, ADPs, and SPFS staff jointly monitored the scheme. Sale of fertilizers at a pre-decided price, through private agro-dealers on a cash-and-carry basis, and without the involvement of government officials were the salient features of this scheme. An assessment of the voucher scheme revealed that all participants including ADP, PCU, farmers, and private agri-input dealers are willing to continue the scheme. FEPSAN appreciated the scheme and will likely promote the concept of vouchers in other geographical areas.

• The Rice Alliance

To promote a collaborative approach by related stakeholders dealing in input supply micro finance, extension services, processing, and marketing, USAID sponsored the initiative of Rice Alliance. IFDC DAIMINA, IITA, Union Bank, Candel Co. Ltd. (Monsanto), National Cereal Research Institute (NCRI) Badeggi, three ADPs, and some others participated in the alliance. DAIMINA coordinated the meetings of rice alliance members and provided funding for farmer trainings. DAIMINA-trained agri-input dealers supplied 323 mt of fertilizers on cash, and the Union Bank provided a loan of \$\frac{N}{2}106,000,000\$ or about US \$803,000 to farmers/agro-dealers. Candel (Monsanto) supplied 4,446 units of R-boxes. (The rice box is a cardboard box prepared by Candel Company consisting of Orizo plus 2 L, Roundup 1 L, Boost extra (foliar spray) 1 L and Delfos (insecticide) 100 mL, and rice seed 12.5 kg). Technical assistance was provided by 30 ADP extension workers. IFDC conducted training on food processing and marketing. A total number of 1,681 farmers planted rice in 2004 and enhanced their crop yields by about 30% in the first year of the program.

• High-Analysis Fertilizers Promoted

To educate the agro-dealers and farmers on the selection of economical and efficient fertilizers products best suited to their soil conditions and cropping pattern, 48 field demonstrations were conducted with DAP, muriate of potash and urea compared with NPK 20:10:10 and single superphosphate and urea. Farmers were trained on the right time and method of application of fertilizers, i.e., basal dose before planting and its incorporation in the soil and urea in three installments starting 2 days after planting. The yield data and cost of fertilizers showed 15%–20% savings in the demonstration plots. The field demos and farmers trainings were conducted jointly with SG 2000 and ADPs.

• Promotion of Small and Medium Food Processing Units

In the third year of the DAIMINA project, the technical feasibility and economic viability of small and medium food-processing units was demonstrated by facilitating the establishment of eight food-processing demonstration centers in the project areas. The units are being operated by four groups of women and four agri-input dealers. In late 2004 the food-processing enterprises

were earning an average of \$\frac{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\t

The DAIMINA project has produced a significant positive impact on the agri-inputs markets in Nigeria as indicated below.

- The DAIMINA-trained agro-dealers attained a significant improvement in the knowledge of inputs, skills of business management and change in attitude towards problems and needs of farmers.
- The formation of trade associations at the national, state, and market levels and training of executive members enhanced the organizational strength of agribusiness enterprises, improved their bargaining power and confidence for policy dialogue with the government.
- The concept, nature, and functioning of agribusiness has been formalized, and private entrepreneurs no longer feel suspicious of the government policies. The role of FEPSAN is now well recognized by FGN, USAID, farmer organizations, and other stakeholders. As a result of DAIMINA influence, FMARD and the state governments have started consulting FEPSAN on issues related to fertilizer procurements and distribution. Similarly, the state governments in the project have appointed two representatives of dealers associations in the agri-advisory committees for consultation on input supply and related issues.
- There is a significant increase in the investment by private sector in the importation of fertilizers in Nigeria. As shown in Figure 4, fertilizer imports increased by 120% during the first half of 2004 compared with the same period in 2003.

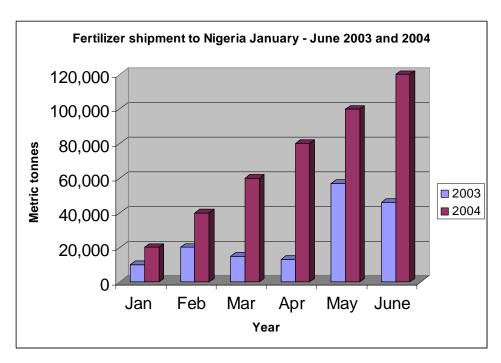


Figure 4. A Comparison of Fertilizer Shipments to Nigeria for the Periods of January to June in 2003 and 2004

- The trained agro-dealers maintained a regular increase and registered of 38.5% growth in the sale of agri-inputs compared with the base year of 2001.
- The price data on inputs show a pattern of stabilization. This is attributable to a reduction in the marketing costs achieved through better logistics planning, timely and collective procurement, reduced handling and storage losses, reliable information on patterns of input demand through improved access to market information, and partnerships with donor-funded projects, government, and NGOs.
- Establishment of input supply chain business networking and capacity-building activities in the project areas has attracted the attention of neighboring states. The state governments of Zamfara, Jigawa, Katsina, Plateau, and Borno have approached IFDC and FMARD to initiate similar activities on a cost-recovery basis. The state governments have also offered to provide office space, vehicles, and manpower for the establishment and training of agri-input dealers.
- The World Bank and the African Development Bank (ADB) have recommended IFDC-DAIMINA to be a service provider in the Fadama II (2004–2009), FAO has identified IFDC

- as a subcontractor in the second phase of SPFS project (2006–2011), and Promoting Pro-Poor Opportunities through Commodity and Service Markets (PrOpCom), a DFID-funded project, has shown interest in subcontracting their training component to IFDC DAIMINA.
- FMARD appointed the DAIMINA project as a collaborating partner in the rice production and export project that began by a presidential initiative. The National Agricultural Council in August 2004 urged all the states of Nigeria to extend cooperation to IFDC in the development of agriculture and agribusiness in Nigeria.
- In a meeting of Agri-Traders Associations held at Ouagadougou in October 2004, sponsored by the MIR project, a regional Africa Traders Association called Federation of Agri-Input Trade Associations in Africa (FATIA) has been formed and included two executive members from DAIMINA-trained associations in Nigeria (Vice-President and Chairman, Fertilizer Committee). The participation of Nigeria in the regional association will enhance further the regional trade in agri-inputs and benefit Nigeria. This also shows the recognition of capacity-building impact of the DAIMINA project.
- A partnership on a cost-recovery basis with SPFS, IITA, FMARD, NSS, and state governments and economical project operations enabled the project to provide the services. Contributions of US \$34,000 for the rice alliance and US \$52,000 for the pre-feasibility study for the fertilizer production facility and extension of activities for about 4 months.
- The development and training of multiple dealers in each of the 40 project markets provided a basis for competition to emerge. The retail prices of inputs have shown stabilization and, in a few cases, a declining trend. Similarly, there is an increase in the services offered by dealers to the customers. Farmers have a choice and can buy products of their choice.
- With DAIMINA as a leading partner, the collaborative approach followed by stakeholders through the Rice Alliance in supplying the farmers with inputs, credit, and extension advice, resulted in enhanced production by about 30%. It also developed a sense of cooperation. Active participation of private agri-dealers in the scheme exhibited the potential that exists in the private sector in offering farm support services.
- The impact of the voucher scheme in eight project sites has been realized as 1,259 farmers received fertilizer on time and all the participating stakeholders are convinced of the benefits of free market systems, thereby enhancing the chances of further policy reforms in Nigeria.

- The demonstration of economic benefits and higher use efficiency of high-analysis fertilizers
 compared with low-analysis fertilizers has convinced the participating farmers and agri-input
 dealers of the need for a wide product range and selection of products suitable to their
 farming systems based on soil fertility level.
- The concept of small packs of inputs introduced by DAIMINA has improved the availability
 of inputs with legitimate weight and quality and thereby increased the demand by
 smallholder kitchen gardeners.

H. Relevance of DAIMINA and Lessons Learned

The DAIMINA project clearly demonstrates that an appropriate mix of interventions (e.g., improved macro-environment, human capacity building, improved market transparency, and improved access to credit) will stimulate increased private sector investment in agricultural markets. The project further demonstrates that significant progress can be achieved in agri-input market development through increased private sector participation. Key lessons learned under DAIMINA include the following:

- Human capacity building, improved market environment, and improved market transparency are keys to private sector participation in the market. The DAIMINA project demonstrated that the supply availability constraint (which previously was key factor in limiting input use) could be removed by engaging the private sector with their enhanced capacity in agribusiness. Training and networking were key activities that accelerated dealer development. The project amply demonstrated that input supply and crop marketing are complementary business functions. (Recently, FGN invited the private sector to take an active role in the food grain trade and food processing). The DAIMINA approach is therefore an efficient and economical means to improve farmers' access to agri-inputs and crop markets.
- Access to credit is a key component to expanded private sector investment, and upon receiving credit, input wholesalers will extend credit sales to dealers. The project baseline assessments verified that credit availability was a limiting factor for private sector investment. Human capacity development, and particularly networking efforts, was key to improving entrepreneurial access to credit.

- Broad-based stakeholder (e.g., public and private sector, farmers, banks, NGOs, etc.) participation will fortify and accelerate the development process. The DAIMINA approach to collaboration and multi-stakeholder participation was a novel approach to development. The project recognized early that policy reform could best be achieved through endorsement by others engaged in agricultural market development. During its implementation period, DAIMINA cultivated solid relationships with 12 projects and/or institutions.
- Market transparency is essential to strategic decision-making at both the public and private sector levels. DAIMINA demonstrated that improved availability of market information is key to reducing transaction costs by the private sector and, at the government level, improved availability of information on market conditions is key to minimizing decisions that may have a negative impact on the private sector.
- Policy reform is not a straightforward process. DAIMINA demonstrated that policy-related
 actions could be influenced when stakeholders work in harmony and policy assessments
 provide a sound basis for constructive dialogue. The issue of subsidies remains controversial
 and politically sensitive. Although DAIMINA has softened the position and opinion of many
 officials, no tangible steps appear to have been taken by FGN to remove subsidies.
- Private sector associations are a valuable component of the development process.
 Development of trade associations at the national, state, and market levels by DAIMINA has proved beyond doubt that strengthening of local institutions is a useful and beneficial means to influence government policy decisions and promote agribusiness development.
- Increased private sector participation will contribute to improved performance in agricultural input markets. The DAIMINA initiatives for the enhancement of the capabilities of agricultural input dealers by providing basic farm advisory services, counseling, and technical literature in local languages to customer farmers and farmer groups is a useful means to develop private sector extension services. Influenced by the DAIMINA model, the World Bank has formulated a draft project proposal on the privatization of extension services in Nigeria. The document supports an important role for private dealers in extension services.

III. Conclusions

DAIMINA has established a solid foundation for agribusiness development in Nigeria by establishing an input supply chain, development of private sector capacity in agri-marketing, strengthening of MIS, and through the initiation of policy dialogue on fertilizer and seed laws. The accomplishments of DAIMINA are a forerunner to several upcoming projects, particularly USAID MARKETS, World Bank/ADB Fadama II, FAO:FGN SPFS, MISTOWA, MIR, and presidential initiatives on enhanced production of selected crops, particularly rice production and export project. The active participation by FMARD, state governments, farmer organizations, commercial banks, and other stakeholders in the implementation of the project has enhanced the confidence of the private sector and accelerated the process of public:private sector participation in agri-development. The agribusiness and private sector development initiatives started by DAIMINA have created demand for such services in many other states as the constraints addressed by DAIMINA in pilot states equally exist in almost all agricultural states of Nigeria.

The trend of annual average growth of 38.5% in the agri-inputs sale turnover by private agro-dealers, 188% increase in fertilizer imports, and 200% increase in the number of farmers visiting the agro-dealers have demonstrated the potential, capacity, and importance of the private sector in supporting the agricultural development in Nigeria. FEPSAN and other state-level trade associations facilitated by DAIMINA have been well recognized by FMARD and other stakeholders. They have started the programs of business promotion to benefit the members and policy dialogue with the government to improve the policy environment. Initial response of the FMARD and state MANRs is very encouraging.

DAIMINA, through the collection and dissemination of market information through fortnightly Nigeria Agri-News letter, bimonthly Agribusiness Newsletter, fortnightly press releases, radio announcements, and the formation of NAMIS, has taken some innovative and bold steps to improve the stakeholders' access to reliable market information. With additional objectives, the recently started USAID:IFDC:MISTOWA project will reinforce and extend the MIS to the West Africa region.

Success of farmer-based field programs (e.g., the rice alliance, fertilizer voucher scheme, and economics of fertilizer use through high-analysis fertilizers) has initiated the process of commercialization of agriculture.

The steps taken by the project to improve the policy environment, demonstration of merits of a wide fertilizer product range, and the fertilizer voucher scheme introduced on a pilot basis, as a market friendly alternative to subsidy, are expected to show results in the future. The actions by FGN are, however, slow and procedures are lengthy and cumbersome. The Nigerian Government is in favor of fertilizer subsidies and an immediate change appears to be difficult. The current system of management of fertilizer subsidy is a disincentive to private sector investment and development of a competitive agri-marketing system, and there is need to build pressure on FGN to effect improvements in the management of fertilizer subsidy. The process of agribusiness development in rural markets is a slow activity, and continued efforts will be required before private sector agribusiness, particularly in the rural markets, becomes self-sustainable.

Appendix l. List of Project Reports, Papers, and Documents

Type of Material

Type of Material
Posters
Application Methods of Nitrogenous Fertilizers
Application Methods of Phosphate and Potash Fertilizers
Agro-dealer (I Serve the Farmer)
Improved Seeds Sold Here (three languages combined)
I Used Improved Seeds and Applied Fertilizers (three languages combined)
Fertilizer Manual
The Role of Manures and Fertilizers in Agriculture
Fertilizer Production and Marketing in Nigeria
Fertilizer Blending Manual
Seed Manual
Agrochemical Manual
Handbills/Brochures
Development of Agri-Input Markets*
DAIMINA Makes a Good Start
Improving Farmers' Access to Agricultural Inputs and Services
Grow Improved Cowpea, Earn High Profit
Cowpea Stickers
Agribusiness Newsletters and Nigeria Agri-Inputs News Bulletins

April 2002 Edition

May 2002 Edition

June 2002 Edition

July/August 2002 Edition

September/October 2002 Edition

November/December 2002 Edition

January 2003 Edition

July 2003 Edition

September 2003 Edition

November 2003 Edition

December 2003 Editions

January 2004 Editions

February 2004 Edition

April 2004 Editions

May 2004 Edition

June 2004 Edition

July 2004 Edition

August 2004 Editions

September 2004 Edition

October 2004 Edition

November 2004 Editions

NAMIS Agri-News Bulletin

Agro-Dealer Boards

Agro-Dealer Directory

Benchmark Surveys

Kano Benchmark Survey, July 2002

Niger Benchmark Survey, October 2003

Oyo Benchmark Survey, July 2002

Quarterly Reports

January-March 2002

April-June 2002

July-September 2002

January-March 2003

April-June 2003

July-September 2003

October–December 2003

January-March 2004

April–June 2004

July-September 2004

Oyo Zonal Office 2002/2003 Annual Report

Bauchi Zonal Office Year 2003 Annual Report

Kano Zonal Office 2002/2003 Annual Report

Assessment of Nigerian Government Fertilizer Policy and Suggested Alternative Market-Friendly Policies, September 2002

Technical Evaluation and Market Analysis of Fertilizer Blending Plants in Nigeria, July 2003

Project Assessment Report, July 2004

Fertilizer Market Assessment Survey Kwara State, June 2004

Review of Nigeria Agricultural Seed Act and Proposed Amendments—A Report of the Seed Law Review Committee (Main Report) and Volume 2: Appendices (With Executive Summary of Main Report), July 2004

Agribusiness Sales and Marketing Manual (Agri-Input and Crop Produce), September 2004

Revised Performance Indicators, August 2003

Workplan Year 1—September 2001-September 2002

USAID Data Report: September-December 2001

Fertilizer Production and Marketing in Nigeria

Improving Farmers' Access to Agricultural Inputs and Services, April 2003

Directory of DAIMINA Trained Agrodealers in Kano, Oyo, and Bauchi States

The Role of Manures and Fertilizers in Crop Production

Association Development Workshop, August 2003

Evaluation of the Sokoto Phosphate Rock Deposit, Nigeria, Final Report, April 2004

Product Knowledge Manual

Agricultural Inputs Policies and Nigerian Development: Proceedings of a National Workshop, August 2003 (IFDC SP-38)

Summary of Project Performance—October 2003-September 2004

Pre-feasibility Study on the Establishment of an Ammonia/Urea Plant in Nigeria, December 2004

Assessment of the Requirements for Establishing a Fertilizer Regulatory System in Nigeria (includes draft fertilizer law and regulations) (2002)

Multilateral Trade Agreements on Agriculture and Implications for Agriculture and Agribusiness Development in Nigeria (2003)